CROATIAN REGISTER OF SHIPPING



Certificate No.

03-001876/031579

TYPE APPROVAL CERTIFICATE

This is to certify that this product complies with the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products.

TYPE AND DESCRIPTION OF PRODUCT:

THREE-PHASE EXPLOSION PROOF ASYNCHRONOUS MOTORS **TYPE 5ABT 71-112**

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Place and date:

KONČAR-MES Ltd.

Fallerovo šetalište 22 10000 Zagreb **CROATIA**

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

CRS RULES FOR THE CLASSIFICATION OF SHIPS, PART 12 - ELECTRICAL EQUIPMENT IEC 60034 series, IEC 60079-0 (2018), IEC 60079-1 (2014), IEC 60079-7 (2015)/A1(2018), IEC 60079-31 (2014).

FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.

APPROVAL IS VALID UNTIL: 2026-03-13 Split, 2022-03-14

Marinko Popović, dipl.ing.

NOTE: This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.

Seal

QF-PTO-01 1/22019-07



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DETAILED PRODUCT DESCRIPTION:

Product: Three-phase cage asynchronous motors with aluminium frame

Design: Explosion proof asynchronous motors totally enclosed in marine design

Type: 5ABT 71-80-90-100-112

Rated voltage: to 750 V

Maximum rated current: to 8,7 A Rated frequency: 50 / 60 Hz

Synchronous speed: 750 to 3600 RPM

Number of poles: 2 to 8 Duty type: S1-S10

Insulation class: F-H (with temperature rise: B class)

Ambient temperature: -20°C to +80°C Rated power: at S1 duty to 4,5 kW Temperature rise of windings: to 90°K

Degree of mechanical protection: IP 55, IP 65, IP 56, IP 66, IP67

Efficiency class: IE1, IE2, IE3

APPLICATION / LIMITATIONS:

Motors are accepted for installation on all vessels classed by CRS.

Ex-certification is not covered by this certificate.

TYPE APPROVAL DOCUMENTATION:

KONČAR-MES Catalogue Flameproof motors ver. 02/2020

KONČAR-MES Technical description Nr. A69192 – Annex 7 Edition 2 dated 02/07/2021 and belonging drawings and test reports

KONČAR-INSTITUT test report Nr. 21572-05/624 EI and Nr. 21572-05/625 EI

KONČAR-MES test reports Nr. A15490/A688998

EU-Type examination Certificate number: CESI 05 ATEX 110X/07 dated 12/07/2021

MARKING OF PRODUCT:

In accordance with IEC 60034-1

Additional marking:

II 2G Ex db IIB T3 Gb or II 2G db eb IIB T3 Gb

II 2G Ex db IIC T3, T4, T5, T6 Gb or II 2G Ex db eb IIC T3, T4, T5, T6 Gb

II 2D Ex tb IIIC T160°C, T130°C, T100°C Db

CONDITIONS FOR CERTIFICATION:

No